Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application: Claim Listing:

1.-25. (Cancelled)

- 26. (Currently Amended) A method for generating an immune response in a patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3' C*pG, wherein pyrimidine C* is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine-and 4-thiouracil, and purine G is a natural or non-natural purine nucleoside.
- 27. (Withdrawn) The method according to claim 26, wherein the oligonucleotide analog immunostimulatory compound is administered in combination with an antibiotic, antigen, allergen, vaccine, antibody, cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA vaccine, adjuvant, or combination thereof.
- 28. (Original) The method according to claim 26, wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 29. (Original) The method according to claim 28, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 30. (Currently Amended) A method for therapeutically treating a patient having disease caused by a pathogen, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3' C*pG, wherein pyrimidine C* is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine and 4-thiouracil, and purine G is a natural or non-natural purine nucleoside.
- 31. (Withdrawn) The method according to claim 30, wherein the pathogen is a virus.
- 32. (Withdrawn) The method according to claim 30, wherein the pathogen is a parasite.

- 33. (Withdrawn) The method according to claim 30, wherein the pathogen is a bacterium.
- 34. (Currently Amended) A method for treating a cancer patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3' C*pG, wherein pyrimidine C* is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine and 4-thiouracil, and purine G is a natural or non-natural purine nucleoside.
- 35. (Original) The method according to claim 34, wherein the immunostimulatory oligonucleotide compound is administered in combination with a chemotherapeutic compound.
- 36. (Currently Amended) A method for treating an autoimmune disorder, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3' C*pG, wherein pyrimidine C* is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine and 4-thiouracil, and purine G is a natural or non-natural purine nucleoside.
- 37. (Withdrawn) The method according to claim 36, wherein the autoimmune disorder is autoimmune asthma.
- 38. (Currently Amended) A method for treating airway inflammation or allergy, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3' C*pG, wherein pyrimidine C* is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine and 4-thiouracil, and purine G is a natural or non-natural purine nucleoside.

39.-54. (Canceled)

55. (New) A method for generating an immune response in a patient, such method comprising administering to the patient an immunostimulatory oligonucleotide

- compound, comprising an immunostimulatory dinucleotide of formula C*pG*, wherein C* is a non-natural pyrimidine nucleoside, and G* is a non-natural purine nucleoside.
- 56. (New) The method according to claim 55, wherein the oligonucleotide analog immunostimulatory compound is administered in combination with an antibiotic, antigen, allergen, vaccine, antibody, cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA vaccine, adjuvant, or combination thereof.
- 57. (New) The method according to claim 55, wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 58. (New) The method according to claim 57, wherein such conjugation is to the 3'-end of the oligonucleotide compound.
- 59. (New) A method for therapeutically treating a patient having disease caused by a pathogen, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG*, wherein C* is a non-natural pyrimidine nucleoside, and G* is a non-natural purine nucleoside.
- 60. (New) The method according to claim 59, wherein the pathogen is a virus.
- 61. (New) The method according to claim 59, wherein the pathogen is a parasite.
- 62. (New) The method according to claim 59, wherein the pathogen is a bacterium.
- 63. (New) The method according to claim 59, wherein the oligonucleotide analog immunostimulatory compound is administered in combination with an antibiotic, antigen, allergen, vaccine, antibody, cytotoxic agent, antisense oligonucleotide, gene therapy vector, DNA vaccine, adjuvant, or combination thereof.
- 64. (New) The method according to claim 59, wherein the immunostimulatory oligonucleotide compound is conjugated to an antigen or vaccine.
- 65. (New) The method according to claim 64, wherein such conjugation is to the 3'-end of the oligonucleotide compound.

- 66. (New) A method for treating a cancer patient, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG*, wherein C* is a non-natural pyrimidine nucleoside, and G* is a non-natural purine nucleoside.
- 67. (New) The method according to claim 66, wherein the immunostimulatory oligonucleotide compound is administered in combination with a chemotherapeutic compound.
- 68. (New) A method for treating an autoimmune disorder, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG*, wherein C* is a non-natural pyrimidine nucleoside, and G* is a non-natural purine nucleoside.
- 69. (New) The method according to claim 68, wherein the autoimmune disorder is autoimmune asthma.
- 70. (New) A method for treating airway inflammation or allergy, such method comprising administering to the patient an immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG*, wherein C* is a non-natural pyrimidine nucleoside, and G* is a non-natural purine nucleoside.